

Serial No. 10/797,631

Customer No.: 53,096

LISTING/AMENDMENTS TO THE CLAIMS

INCLUDING STATUS INDICATORS

Please place the claims in the following form:

1. (Previously presented) A method for whitening a patient's teeth comprising the steps of:

isolating the teeth to be treated;
preparing a bleaching composition comprising an oxygen radical generating agent and a buffer for raising the pH of said bleaching composition to between 7 and 11; applying said composition to said isolated teeth; and
exposing each of said isolated teeth to light having a wavelength between about 450 nanometers and about 530 nanometers for a selected time interval to accelerate whitening.

2. (Previously presented) A method as described in claim 1, wherein said buffer is selected from the group consisting of urea, sodium carbonate, sodium bicarbonate, calcium carbonate, calcium bicarbonate, calcium hydroxide, or combinations thereof.

3. (Previously presented) The method of claim 1, further comprising a preconditioning step, comprising:

applying a preconditioning composition to the isolated teeth for a selected time interval to permit the composition to soak into the isolated teeth; and
removing the preconditioning composition from the isolated teeth.

4. (Previously presented) The method of claim 1, wherein the time interval is between about 15 minutes and about 60 minutes.

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5. (Previously presented) The method of claim 4, wherein the time interval is about 30 minutes.

6. (Previously presented) The method of claim 1, wherein the light raises the pulp temperature of the isolated teeth by no more than about 6 °C.

7. (Previously presented) The method of claim 1, wherein the light delivers no more than about 25 joules of energy to each tooth.

8. (Previously presented) The method of claim 7, wherein the light delivers a continuous output or a pulsing output.

9. (Previously presented) The method of claim 7, wherein the light delivers about 12.5 joules of energy to each tooth.

10. (Previously presented) The method of claim 1, wherein the light has a beam diameter between about 1 mm and about 20 mm.

11. (Previously presented) The method of claim 1, wherein the oxygen radical generating agent is a peroxide.

12. (Previously presented) The method of claim 11, wherein the peroxide comprises hydrogen peroxide, carbamide peroxide, calcium carbonate peroxide, sodium carbonate peroxide, sodium perborate or mixtures thereof.

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13. (Previously presented) The method of claim 1, wherein the oxygen radical generating agent used in the bleaching composition has a concentration of between about 3% and about 50%.

14. (Previously presented) The method of claim 13, wherein the concentration of the oxygen radical generating agent is between about 35% and about 50%.

15. (Previously presented) The method of claim 1 further comprising a desensitizing agent, a color stabilizing agent, a thickening agent, a booster agent, or combinations thereof.

16. (Previously presented) A method for whitening a patient's teeth, comprising the steps of:

isolating the teeth to be treated;

preparing a bleaching composition comprising an oxygen radical generating agent and a booster agent;

applying the bleaching composition to the isolated teeth; and

exposing each of the isolated teeth to light for a selected time interval to accelerate whitening.

17. (Previously presented) The method of claim 16, wherein the booster agent is selected from the group consisting of ammonium persulfate, sodium persulfate, potassium persulfate, sodium perborate, sodium carbonate, sodium bicarbonate, calcium carbonate, ammonium hydroxide, sodium hydroxide, potassium hydroxide, and calcium hydroxide.

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18. (Previously presented) The method of claim 16, wherein the booster agent has a concentration of between about 1% and about 80% by weight of the bleaching composition.

19. (Previously presented) The method of claim 18, wherein the concentration of the booster agent is about 30% by weight of the bleaching composition.

20. (Previously presented) The method of claim 16, further comprising a buffering agent, desensitizing agent, a color stabilizing agent, a thickening agent, a booster agent, or combinations thereof.

21. (Previously presented) The method of claim 20 wherein the desensitizing agent is selected from the group consisting of fluoride, calcium, and phosphate.

22. (Previously presented) The method of claim 21, wherein the desensitizing agent has a concentration of between about 0.1% and about 10% by weight of the bleaching composition.

23. (Currently amended) The method of claim 203, wherein the thickening agaent is selected from the group consisting of silicates, hydroxyethylcellulose, lanolate, palmitate, oleate, sodium lauryl sulfate, sodium stearate, and calcium stearate.

24. (Previously presented) The method of claim 16, wherein said selected time interval is between about 15 minutes and about 60 minutes.

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25. (Previously presented) The method of claim 24, wherein the thickening agent has a concentration of between about 1% and about 20% by weight of the bleaching composition.

26. (Previously presented) The method of claim 20, wherein the buffering agent is selected from the group consisting of urea, sodium carbonate, sodium bicarbonate, calcium carbonate, calcium bicarbonate, ammonium hydroxide, sodium hydroxide, potassium hydroxide, and calcium hydroxide.

27. (Previously presented) The method of claim 20, wherein the buffering agent in the bleaching composition has a concentration selected to maintain a pH between about 7 and about 11.

28. (Previously presented) A method for whitening a patient's teeth, comprising the steps of:

isolating the teeth to be treated;
preparing a bleaching composition comprising an oxygen radical generating agent;

applying the bleaching composition to the isolated teeth; and
exposing each of the isolated teeth to light for a selected time interval to accelerate whitening, wherein the light comprises one or more wavelengths that raise the pulp temperature of the isolated teeth by no more than about 6 °C.

29. (Previously presented) The method of claim 28 wherein said time interval is between about 15 minutes and about 60 minutes.

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30. (Previously presented) The method of claim 28 wherein the bleaching composition further comprises a pigment that increases absorption of light.

31. (Previously presented) The method of claim 28, wherein the bleaching composition further comprises fluoride, calcium, phosphate or combinations thereof.

32. (Previously presented) The method of claim 28 wherein the light has a continuous output or a pulsing output.

33. (Previously presented) The method of claim 28 wherein said light has a wavelength between about 450 nanometers and about 530 nanometers.

34. (Previously presented) The method claim of 30, wherein said pigment comprises colors of yellow, red or orange.